



## WHAT IS CLAIMED IS:

- 1. A method for tunneling voice data over one or more networks, comprising:
- (a) transmitting a notification to a called party's network that a calling party's handset is calling from a particular type of network; and
- (b) loading a software-defined vocoder into the called party's handset based on the transmitted notification, wherein the software-defined vocoder, when executed by the called party's handset, translates voice data communicated between the calling party's handset and the called party's handset.
- 2. The method of claim 1, wherein the voice data is tunneled from the calling party's handset and the calling party's network, through any number of different networks, to the called party's network and called party's handset, without any vocoding conversions, except at the handsets.
- The method of claim 1, wherein the software-defined vocoder is stored a component of the called party's network and is downloaded from the component to the called party's handset.
- 4. The method of claim 1, wherein the notification is transmitted during call setup.
  - 5. An apparatus for tunneling voice data over one or more networks, comprising:
  - (a) means for transmitting a notification to a called party's network that a calling party's handset is calling from a particular type of network; and
- (b) means for loading a software-defined vocoder into the called party's handset based on the transmitted notification, wherein the software-defined vocoder, when executed by the called party's handset, translates voice data communicated between the calling party's handset and the called party's handset.
- The apparatus of claim 5, wherein the voice data is tunneled from the calling party's handset and the calling party's network, through any number of different networks,

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to the called party's network and called party's handset, without any vocoding conversions, except at the handsets.

- 7. The apparatus of claim 5, wherein the software-defined vocoder is stored a component of the called party's network and is downloaded from the component to the called party's handset.
  - 8. The apparatus of claim 5, wherein the notification is transmitted during call setup.
  - A method for tunneling voice data over one or more networks, comprising:
    (a) receiving a notification from a calling party's network that it is a particular type of network; and
- (b) loading a software-defined vocoder into a called party's handset based on the received notification, wherein the software-defined vocoder, when executed by the called party's handset, translates voice data communicated between the calling party's handset and the called party's handset.
- 10. The method of claim 9, wherein the voice data is tunneled from the calling party's handset and the calling party's network, through any number of different networks, to the called party's network and called party's handset, without any vocoding conversions, except at the handsets.
- 11. The method of claim 9, wherein the software-defined vocoder is stored a component of the called party's network and is downloaded from the component to the called party's handset.
  - 12. The method of claim 9, wherein the notification is transmitted during call setup.
    - 13. An apparatus for tunneling voice data over one or more networks, comprising:

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- (a) means for receiving a notification from a calling party's network that it is a particular type of network; and
- (b) means for loading a software-defined vocoder into a called party's handset based on the received notification, wherein the software-defined vocoder, when executed by the called party's handset, translates voice data communicated between the calling party's handset and the called party's handset.
- 14. The apparatus of claim 13, wherein the voice data is tunneled from the calling party's handset and the calling party's network, through any number of different networks, to the called party's network and called party's handset, without any vocoding conversions, except at the handsets.
- 15. The apparatus of claim 13, wherein the software-defined vocoder is stored a component of the called party's network and is downloaded from the component to the called party's handset.
- 16. The apparatus of claim 13, wherein the notification is transmitted during call setup.
- 20 A method for tunneling voice data over one or more networks, comprising:
  - (a) loading one of a plurality of vocoders into a processor of a handset, wherein the vocoder is selected based on a particular type of network communicating with the handset; and
  - (b) executing the loaded vocoder in the processor of the handset, wherein the vocoder translates voice data communicated to the handset.
    - 18. The method of claim 17, wherein the voice data is tunneled from a calling party's handset and the calling party's network, through any number of different networks, to a called party's network and the called party's handset, without any vocoding conversions, except at the handsets.

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- 19. The method of claim 17, wherein the vocoder is stored a component of the handset and is loaded into the processor from the component.
- The method of claim 17, wherein the vocoder is stored a network
  component and is downloaded from the network component into the processor of the handset.
  - 21. An apparatus for tunneling voice data over one or more networks, comprising:
  - (a) means for loading one of a plurality of vocoders into a processor of a handset, wherein the vocoder is selected based on a particular type of network communicating with the handset; and
  - (b) means for executing the loaded vocoder in the processor of the handset, wherein the vocoder translates voice data communicated to the handset.
- The apparatus of claim 21, wherein the voice data is tunneled from a calling party's handset and the calling party's network, through any number of different networks, to a called party's network and the called party's handset, without any vocoding conversions, except at the handsets.
  - 23. The apparatus of claim 21, wherein the vocoder is stored a component of the handset and is loaded into the processor from the component.
  - 24. The apparatus of claim 21, wherein the vocoder is stored a network component and is downloaded from the network component into the processor of the handset.

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